

# The Research Files Episode 31: Data with Professor Amanda Datnow

Jo Earp

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*Hello, thank you for downloading this podcast from Teacher magazine – I'm Jo Earp. My guest on The Research Files today is Amanda Datnow, a Professor in the Department of Education Studies and Associate Dean of the Division of Social Sciences at the University of California, San Diego. Her current research explores best practice in relation to data-informed teaching and learning, including how to build educator capacity. In August, Professor Datnow will be in Melbourne for [Research Conference 2017](#), hosted by the Australian Council for Educational Research, where she'll deliver a keynote titled 'Opening or closing doors for students? Equity and data-driven decision-making'. Here, she joined me on the line from California.*

**Jo Earp: Professor Amanda Datnow, welcome to The Research Files. I mentioned in the intro, you're one of the keynotes at Research Conference 2017 at the end of August. The theme of this year's conference is Leadership for Improving Learning. Your research expertise is in K-12 education and you've travelled all around the world with that. Obviously, there are local influences and needs, but I'm interested in your view of school leadership in a global context. What are the common issues around the world that you find?**

Amanda Datnow: There are two abiding concerns that I find wherever I go. One of them is this press for instructional improvement, and the other one is the interest in equity, the need to close achievement gaps between groups of students. I see those everywhere and also, as a reform strategy, I see an interest in the use of data to inform instructional decision making as well.

**JE: Is that [data use] something that you've seen more of in the last five to 10 years then?**

AD: Yes, I'd say the trend towards data use has been probably about the last decade. In many localities around the world the enthusiasm for data use has produced volumes of data that are intended to be used to improve classroom instruction and school improvement planning at the leadership level, but oftentimes they aren't and this is done often in a cursory manner because leaders and teachers have so many demands on their time.

**JE: We'll come back to the issue of data shortly. Taking things down to the classroom level, from that leadership level, I've heard you talk previously about the increasingly complex nature of teaching. What are the challenges that teachers face today?**

AD: As I mentioned a moment ago, the time demand is probably the biggest one – finding time to work with colleagues and even to work individually to plan effective instruction. This is particularly challenging because teachers find themselves with a large range of students in their classrooms. Teachers that I meet with often say 'I don't know how to differentiate instruction for the broad range in my room' and they try in earnest to meet everybody's needs but they sometimes don't have the toolbox of instructional strategies that can help them meet every child's needs.

**JE: Given these challenges then, why is it important for educators – not just teacher but leaders as well – to have this evidence-informed approach to**

**practice? Also, not just the formal academic research, but gathering, understanding and using data from their own settings.**

AD: I think 'data', broadly speaking, can provide at least a clue as to where teachers and leaders might best place their efforts. So, if we anchor decisions in evidence we can avoid, as what one teacher said 'shooting darts blindfolded'. You know, you don't necessarily know whether the efforts that you're attempting, in terms of change, are going to address the needs. So, the goal is to anchor those efforts around particular needs that students have in a school or in the classroom.

But, the tricky element is broadening our conception of what we mean by data. Because, oftentimes when I talk to teachers and I say 'data are really important to school improvement', they're thinking standardised test data; data that might come from the government or might be administered outside of their own classroom. They oftentimes bristle at those data because they don't see them as immediately useful to inspiring improvements in instruction.

So, when I talk with teachers I say 'no, no, no, what we want is all forms of "data" – and by that I mean information on student learning – [data] are really important to informing instruction. That can be anything from teachers' close observations about student work as they're walking around the room, it can be homework that students complete, it can be assessments that they complete, it can be assessments that teachers design, it can be portfolios. It can be your whole range of information that we want to encourage teachers to use as evidence to inform instruction. Their goal is to anchor those instructional decisions in evidence that they can be more targeted in their approaches to addressing students' needs.

And I will admit that teachers will tell me that this doesn't make teaching easier; it's more labour intensive, it's more time intensive. However, they find that they get much better student results, they see more student growth when they're able to really dig in and say 'what is it that my students are struggling with?'. It's not that they're, let's say, may be categorised as low performing in maths, it's that they're particularly struggling with proportional reasoning – and if we know that then we can provide particular targeted support to those students that might need that, in the context of a classroom.

So, those kinds of strategies are useful, but you really need some fine grain data (so to speak) to help you understand where those gaps in learning might be.

**JE: And presumably the professional learning around that to back it up? Because, it's a skill isn't it – knowing what data to look at, what to use when ... otherwise it can be just so overwhelming can't it?**

AD: Absolutely, and I think data literacy is not necessarily a skill that we teach in teacher education, at least in the US, I don't know as much about other countries in terms of the professional learning that takes place at the preservice level. Teachers tend to not have even a great deal of training on assessment and how it functions in the teaching process.

Understanding data, what it's used for, what it can't be used for, is really important but we oftentimes don't build teacher expertise in that. Consequently, when they go in schools the predominant mode for building teachers' capacity is to put them in professional learning communities where the hope is that they will learn from each other – but oftentimes we don't provide the training even in those contexts. And so, hopefully there's some expertise in the group that might lead teachers along to develop a greater understanding on how to use data and to make sense of data, but that often isn't the case.

So teachers [really] rely on leadership to provide a framing around: what data are used for; what should we pay attention to? So, we'll find schools where leaders are very much focused around accountability data that they're developing ... that are administered from the outside, and that provides one kind of frame, but that accountability frame tends not to be useful for instructional improvement. But when leaders can provide a frame that's focused on instruction and say 'listen, all forms of evidence are useful here, what we want you to do is anchor your instructional decisions in evidence, and talk about instruction and use that evidence to think about student thinking ... what do we really know about student learning in this context?' – those kinds of conversations around data can lead to much more productive work than the ones that are focused on '[let's use] data to think about how we're going to

improve test scores'.

Another area for capacity building for teachers is developing their instructional expertise, their instructional strategies. Oftentimes this also happens in professional learning community meetings, teachers get an opportunity to share their expertise, share their different strategies for addressing students' needs.

This is a really important component because oftentimes teachers will say 'well, now I understand the data, I see where the patterns are, but I need to have some different ways of teaching these concepts to my students so that I can better meet their needs'.

So, if it's a well-functioning professional learning community, teachers can share strategies with each other. But there's also oftentimes a need for a coach, a principal, perhaps someone from the outside who might be able to provide some additional strategies that teachers may be able to use to address those needs.

**JE: Your Research Conference keynote is titled *Opening or closing doors for students? Equity and data-driven decision-making*. Without giving away too much, can you give listeners a bit of an overview of the kinds of things you'll be talking about?**

AD: Yeah, you know I think what we've found is that data use can be a vehicle for achieving equity. As I mentioned, if we get more targeted about how we think about student achievement we can hopefully lift all students up by differentiating instruction in useful ways.

However, we've also found that data use can close doors for students. For example, data can be used to track or stream students in ways that limit their future possibilities. Data can be used to confirm assumptions about students, rather than to re-examine them. What we hope is that data will do is lead teachers and educators to say 'ah, I see a new pattern here that I hadn't imagined before'. But it's also the case that data can be used in ways that might lead educators to say 'look, it's exactly as I imagined this particular group to be as low achieving, that's what I've always thought, I don't see anything useful here in these data'.

So, again the framing of the conversation is really important, and the thinking about students' strengths rather than weaknesses, and to really think about 'how can we create a portrait of student achievement with the variety of forms of information on student learning that we have?' Because the more full portrait will have a better sense of where to go next in lifting students' achievement.

**JE: Well, we look forward to that. It's been great to speak to you today, we'll catch up with you again at the conference in August. For now, Professor Amanda Datnow, thanks very much for talking to The Research Files.**

AD: My pleasure.

*That's all for this episode – to keep listening or to download all of our podcasts for free visit [acer.ac/teacheritunes](http://acer.ac/teacheritunes) or [www.soundcloud.com/teacher-ACER](http://www.soundcloud.com/teacher-ACER). You can also check out the full transcript of this podcast and related reading at [www.teachermagazine.com.au](http://www.teachermagazine.com.au) where, of course, you can also access the latest articles, videos and infographics.*

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